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PATENTAppl. No. 10/611,442
Amdt. dated January 10, 2007
Reply to Office Action of November 16, 2006REMARKS/ARGUMENTS

The Office has indicated that claims 1-3, 16-17, 21-22, 24, 28 and 29 are allowed.

Claims 25-27, 30 and 31 stand rejected under 35 USC 112, first paragraph as containing added material. The Office states that there is not support in the specification for the negative proviso "does not comprise the *S. erythraea* Meg CII gene." Applicants respectfully direct the Examiner's attention to paragraph [0013] of the specification, which was noted in Applicant's amendment and which is reproduced below.

Thus, in one embodiment, the invention provides recombinant DNA compounds that comprise the C-6 hydroxylase (the *megF* gene), and C-12 hydroxylase (the *megK* gene), the desosamine biosynthesis and desosaminyl transferase enzymes and the recombinant proteins that can be produced from these nucleic acids in the recombinant host cells of the invention. In some embodiments, the invention provides an isolated, purified, or recombinant nucleic acid comprising a polyketide modifying gene, wherein said gene encodes one of the polyketide modifying enzymes MegR, MegF, MegK, MegCIV, MegCV, MegBVI, MegBIII, MegL, or MegM. In some embodiments, the nucleic acid is less than about 9.0 kilobases in length. In some embodiments, the nucleic acid does not also comprise one or more of the polyketide modifying genes *megBI*, *megBV*, *megBIV*, *megCI*, *megCII*, *megDII*, *megDIII*, *megDIV*, *megDV*, *megDVII*, and *megY*. In some embodiments, the gene encodes one of the polyketide modifying enzymes MegR, MegK, MegCIV, MegCV, or MegBVI. In some embodiments, the gene encodes one of the polyketide modifying enzymes MegF, MegBIII, MegL, or MegM. In some embodiments, the invention provides an isolated, purified, or recombinant nucleic acid containing genes for the biosynthesis and attachment of mycarose to a polyketide, where the genes include the *megM*, *megL*, *megBIII*, *megBIV*, *megDIV*, *megBV*, *meg BII* (*megBII-2*), and *megBVI* genes, and, optionally, the

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megF gene. In some embodiments, the polyketide modifying enzyme has an amino acid sequence that is encoded by SEQ ID NO: 1 or SEQ ID NO: 2, or hybridizes to SEQ ID NO: 1 or SEQ ID NO: 2 under stringent conditions, or has at least about 90% sequence identity to SEQ ID NO: 1 or SEQ ID NO: 2. In some embodiments, the polyketide modifying gene is operably linked to a heterologous promoter. In some embodiments, the invention provides an isolated, purified, or recombinant nucleic acid that contains a polyketide modifying enzyme gene megK, megCV, megCIV, megR, megBVI, megF, megBIII, megL, or megM. [Emphasis added]

Similar support is found in paragraph [0073]. Applicants respectfully submit it is clear that a nucleic acid not encoding Meg CII or MegBIII gene is supported in the specification.¹

In view of these amendments and remarks, it is believed the claims are in condition for allowance. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,


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¹ As this is a relatively simple issue, Applicants' representative attempted to reach the Examiner by telephone, but was unable to do so. The Examiner is invited to contact the undersigned if she believes any issues remain.